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(FILE 'HOME' ENTERED AT 22:01:57 ON 22 JAN 2006)

FILE 'CAPLUS' ENTERED AT 22:04:15 ON 22 JAN 2006

L1 2668400 S PREPN/IA  
L2 43971 S (FATTY(3W)ESTER#)/IA  
L3 1013987 S (FAT# OR OIL#)/IA  
L4 232222 S ALCOHOL/IA  
L5 2325360 S WATER/IA  
L6 483 S L1(4W)L2  
L7 6 S L6 AND L3 AND L4 AND L5  
L8 29335 S ((FATTY(2W)ACID)(3W)ESTER#)/IA  
L9 403 S L1(4W)L8  
L10 5 S L9 AND L3 AND L4 AND L5  
L11 0 S L10 NOT L7

FILE 'USPATFULL' ENTERED AT 22:08:54 ON 22 JAN 2006

L12 57247 S ((FATTY(2W)ACID)(3W)ESTER#)  
L13 65407 S (FATTY(3W)ESTER#)  
L14 664333 S (FAT# OR OIL#)  
L15 487274 S ALCOHOL#  
L16 1271298 S WATER  
ACT PREPS PREPS/Q

L17 QUE PREPAR? OR METHOD OR MAKING

L18 3070795 S L17  
L19 974 S L18(4W)L12  
L20 699 S L19 AND L14 AND L15 AND L16  
L21 5921 S 554/NCL  
L22 162 S L21 AND L20  
L23 918 S L12 AND L14 AND L15 AND L16 AND L21  
L24 3 S SUBCRITICAL  
L25 1756 S SUBCRITICAL  
L26 5 S L20 AND L25  
L27 3 S SAKA SHIRO/IN,AU

FILE 'CAPLUS' ENTERED AT 22:16:21 ON 22 JAN 2006

L28 2412 S SUBCRITICAL?/IA  
L29 0 S L9 AND L28  
L30 118 S SAKA SHIRO/IN,AU  
L31 7 S L2 AND L30  
L32 11 S L9 AND L3 AND L4  
L33 6 S L32 NOT L7  
L34 6 S L33 NOT L10  
SEL L34 1 PI

FILE 'WPIDS' ENTERED AT 22:24:30 ON 22 JAN 2006

L35 0 S E1  
L36 0 S IN182417/PN  
E IN182417/PN  
L37 89 S (BIODIESEL(3W)FUEL#)

FILE 'CAPLUS' ENTERED AT 22:28:08 ON 22 JAN 2006

L38 607 S (BIODIESEL(3W)FUEL#)/IA  
L39 1 S L6 AND L38 AND L3 AND L4  
L40 2 S L6 AND L38

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DOCUMENT NUMBER: 141:143092  
TITLE: Two-step preparation for catalyst-free  
**biodiesel fuel** production:  
Hydrolysis and methyl esterification  
AUTHOR(S): Kusdiana, Dadan; Saka, Shiro  
CORPORATE SOURCE: Graduate School of Energy Science, Kyoto University,  
Kyoto, 606-8501, Japan  
SOURCE: Applied Biochemistry and Biotechnology (2004),  
113-116, 781-791  
CODEN: ABIBDL; ISSN: 0273-2289  
PUBLISHER: Humana Press Inc.  
DOCUMENT TYPE: Journal  
LANGUAGE: English

AB **Biodiesel fuel** was prepd. by a two-step reaction:  
hydrolysis and Me esterification. Hydrolysis was carried out at a  
subcrit. state of water to obtain fatty acids from triglycerides of  
rapeseed oil, while the Me esterification of the hydrolyzed products of  
triglycerides was treated near the supercrit. methanol condition to  
achieve fatty acid Me esters. Consequently, the two-step **prepn.**  
converts rapeseed oil to **fatty acid Me esters** in  
considerably shorter reaction time and milder reaction condition than the  
direct supercrit. methanol treatment. The optimum reaction condition in  
this two-step **prepn.** was 270.degree. and 20 min for hydrolysis and Me  
esterification, resp. Variables affecting the yields in hydrolysis and Me  
esterification are discussed.

REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L40 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2001:397069 CAPLUS  
DOCUMENT NUMBER: 134:365821  
TITLE: Process for producing fatty acid lower alcohol ester  
INVENTOR(S): Fukuda, Hideki; Noda, Hideo  
PATENT ASSIGNEE(S): Kansai Chemical Engineering Co., Ltd., Japan  
SOURCE: PCT Int. Appl., 36 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001038553	A1	20010531	WO 2000-JP8185	20001120
W: AU, CA, CN, JP, KR, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR				
US 6982155	B1	20060103	US 2002-130977	20020524
PRIORITY APPLN. INFO.:			JP 1999-336681	A 19991126
			WO 2000-JP8185	W 20001120

AB A process for efficiently producing a fatty acid ester at a low cost which  
comprises reacting an immobilized intact microorganism producing lipase  
with a fat or an oil and a liner lower alc. in a system contg. little or  
no solvent in the presence of water. Because the intact microorganism  
does not receive any solvent-treatment the **prepn.** of  
**fatty acid ester** is simple. The fat is selected from  
natural fats, and oils such as vegetable fats and oils, and animal fats  
and oils or waste oils thereof. Therefore, a waste oil contg. much  
moisture is usable as the starting material, which makes it possible to  
recycle waste oils and, at the same time, provide a **biodiesel**  
**fuel** with little environmental pollution.

REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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